

-6-

We Claim:

1. An echo cancelling system for cancelling echoes in a communication path comprising:
- 5 an echo locator coupled to said communication path to locate the positions of echo signals received from said communication path; and
- an echo canceller coupled to said communication path to cancel echo signals received therefrom, said echo canceller becoming active in regions corresponding to the positions of echo signals in response to said echo locator.
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2. An echo cancelling system as defined in Claim 1, wherein said echo canceller includes a first adaptive filter including selectable filter coefficients, said echo locator activating selected filter coefficients of said first adaptive filter corresponding to the positions of echo signals received from said communication
- 15 path.
3. An echo cancelling system as defined in Claim 2, wherein said echo locator includes a second adaptive filter generating an aliased transfer function approximating that of said communication path, peaks in said transfer function being
- 20 used by said echo locator to activate said selected filter coefficients.
4. An echo cancelling system as defined in Claim 3 wherein said echo locator generates output signals corresponding to peaks in said transfer function, said output signals being applied to said echo canceller to activate selected filter
- 25 coefficients corresponding to said peaks, the magnitude of said output signals being dependent on the magnitude of said peaks.
5. An echo cancelling system as defined in Claim 4 wherein said first and second adaptive filters are LMS adaptive filters.
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6. A method of cancelling echoes in a communication path comprising the steps:

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locating the positions of echo signals in said communication path; and
activating an echo canceller only in regions corresponding to the
positions of the echo signals thereby to cancel echoes in said communication path.

5 7. The method of Claim 6 wherein said activating step further includes
the step of activating selected filter coefficients of an adaptive filter in said echo
canceller corresponding to the position of echo signals received from said
communication path.

10 8. The method of Claim 7 further comprising the step of weighting the
selected filter coefficients in dependence of the magnitude of echo signals received
from said communication path.

15 9. An echo locator to locate echoes in a communication path comprising:
a first downsampler downsampling signals transmitted to said
communication path and generating downsampled reference signals;
a second downsampler downsampling return signals received from said
communication path and generating downsampled return signals; and
an adaptive filter generating an aliased transfer function approximating
20 that of said communication path to produce aliased estimated return signals in
response to said downsampled reference signals, said adaptive filter subtracting the
aliased estimated return signals from said downsampled return signals to generate
error signals, said error signals being fed back to said adaptive filter to adjust the
transfer function thereof, said adaptive filter generating output corresponding to peaks
25 in said transfer function thereby to signify the location of echoes in said return
signals.

10. An echo locator as defined in Claim 9 wherein said adaptive filter is an
LMS adaptive filter.